

Supporting Information:

The observation of high-order charge-current configurations in plasmonic meta-atoms: A numerical approach

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S1. Theoretically computed transmission spectrum

S2. Magnetic field intensity

1. Theoretically computed transmission spectrum

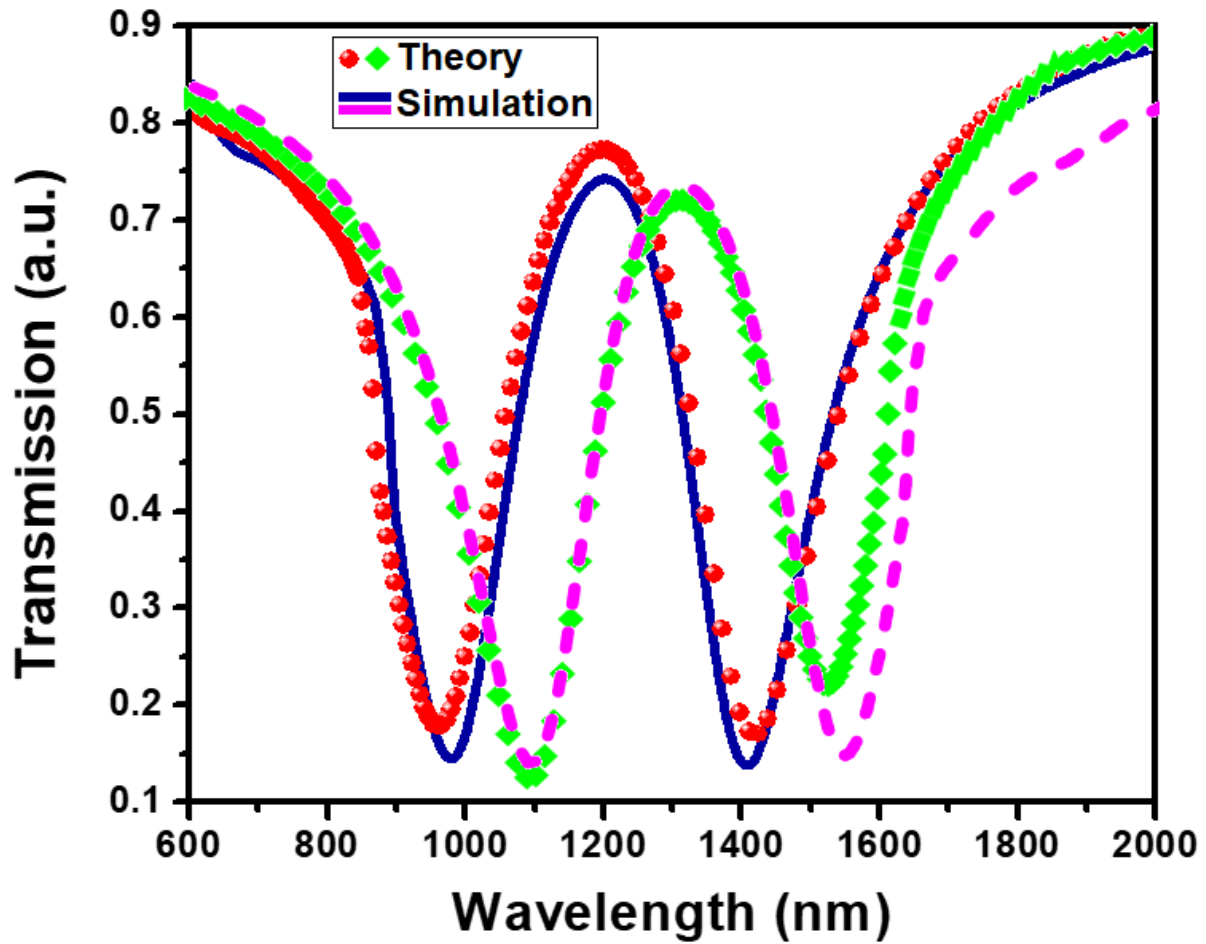


Figure S1. Normalized amplitude transmission spectra for the theoretical analysis, compared with the simulation results. The solid blue and pink lines are the simulation results in vacuum and in the presence of alumina spacers. The red-circles correspond to the theory in vacuum, and green diamonds correspond to the theory in the presence of alumina spacers.

2. Magnetic-field intensity

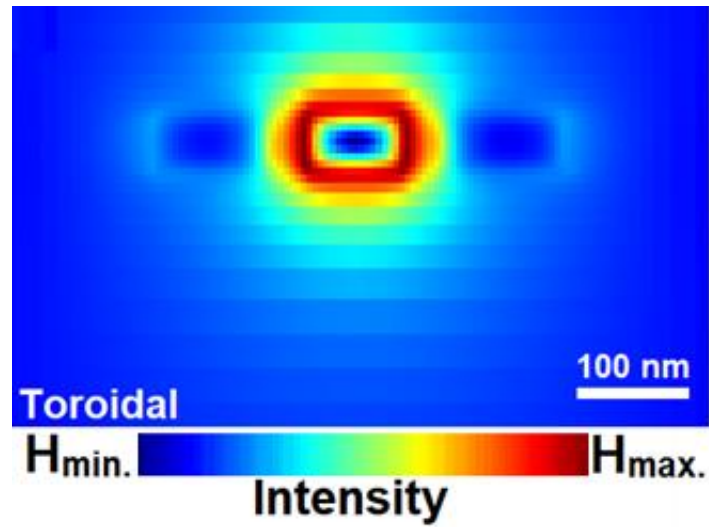


Figure S2. Cross-sectional full-field electromagnetic simulation of the magnetic field (H-field) intensity across the plasmonic meta-atom at toroidal dipole resonance ($\lambda \sim 1100$ nm).